

**The Flexibility of Healthcare Teams. A Mixed  
Methods Study of Doctors and Nurses in an  
Emergency Department.**

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**Submitted in fulfilment of the requirements for the degree of  
Doctor of Philosophy in the Faculty of Health at the University  
of Technology Sydney**

**2018**

## **CERTIFICATE OF ORIGINAL AUTHORSHIP**

*I, Sarah Wise declare that this thesis, is submitted in fulfilment of the requirements for the award of Doctor of Philosophy, in the Health Faculty at the University of Technology Sydney.*

*This thesis is wholly my own work unless otherwise reference or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.*

*This document has not been submitted for qualifications at any other academic institution.*

*This research is supported by an Australian Government Research Training Program Scholarship.*

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*Date:*    7<sup>th</sup> June 2018

## ACKNOWLEDGEMENTS

I am indebted to the emergency department staff who welcomed me into their world and tolerated my hanging around with humour and grace. I am in awe of what they do every day and hope this study has done justice to their incredible work. Special thanks are due to the clinical nurse consultants and educators, and to the deputy medical director who helped make it happen.

Deepest thanks to my supervisors Professor Christine Duffield, Professor Margaret Fry, and Associate Professor Michael Roche for their patience and wise guidance. They never let me down. Thanks also to Dr Andrew Moors whose editorial advice on the early chapters helped clarify my writing.

I must also acknowledge the University Technology Sydney for their generous financial support through the Chancellor's Research Scholarship which encouraged me to be bold.

High fives to my PhD comrades for their endless supply of emotional support and sugary treats.

Finally, this thesis is dedicated to my beautiful family. To Miles, my partner in crime, without whose love and support this could not have started or finished. To Barnaby and Silas who inspire me every day with their invincible grit... bounce back, don't quit!

# TABLE OF CONTENTS

CERTIFICATE OF ORIGINAL AUTHORSHIP .....	i
ACKNOWLEDGEMENTS .....	ii
TABLE OF CONTENTS.....	iii
LIST OF TABLES .....	vi
LIST OF FIGURES .....	vii
ABSTRACT .....	viii
CHAPTER 1: INTRODUCTION .....	1
Healthcare Reform and Workforce Flexibility.....	1
The Inflexibility of the Healthcare Division of Labour .....	3
Study Aim and Objectives .....	6
Structure of the Thesis .....	7
CHAPTER 2: BACKGROUND.....	9
Introduction .....	9
The Regulation of Medicine and Nursing in Australia.....	9
The Redistribution of Medical Tasks to Nurses – A Long-Term Trend.....	13
Emergency Departments .....	15
<i>Fast Track Model of Care</i> .....	17
Summary .....	18
CHAPTER 3: ANALYTICAL FRAMEWORK.....	19
Introduction .....	19
Before Flexibility: The Stability of Taylorism .....	19
Atkinson’s Functional Flexibility.....	22
<i>Multiskilling</i> .....	24
<i>Teams</i> .....	25
<i>Autonomy</i> .....	26
Ideal Types of Taylorism and Functional Flexibility .....	27
Summary .....	28
CHAPTER 4: LITERATURE REVIEW .....	29
Introduction .....	29
<i>Literature Review Method</i> .....	29

Skills and Tasks.....	31
<i>Creating New Nursing Roles</i> .....	31
<i>Adding Medical Tasks to Existing Nursing Roles</i> .....	34
Teamwork in Healthcare .....	36
Nurses' Autonomy in Medicine's Focal Tasks .....	40
<i>Protocols for Registered Nurses</i> .....	40
<i>Workplace Restrictions on Nurse Practitioners' Autonomy</i> .....	43
Summary of the Evidence .....	46
<b>CHAPTER 5: METHODOLOGY AND STUDY DESIGN .....</b>	<b>48</b>
Introduction .....	48
The Methodological Approach.....	48
Selecting a Mixed Methods Design.....	50
Methods within the Explanatory Sequential Design .....	51
<i>Phase 1: Work Observations (QUAN + qual)</i> .....	51
<i>Phase 2: Interviews (QUAL)</i> .....	52
Summary.....	52
<b>CHAPTER 6: METHODS .....</b>	<b>53</b>
Introduction .....	53
Study Design.....	53
Study Site .....	54
Phase 1 Work Observations.....	54
Phase 2 Interviews .....	66
Meta-inferences .....	71
Ethical Considerations .....	72
Summary.....	72
<b>CHAPTER 7: WORK OBSERVATION FINDINGS .....</b>	<b>74</b>
Introduction .....	74
<i>Fast Track Model of Care and Staffing</i> .....	74
Time Study Sample and Participants .....	76
Task Distribution by Top-Level Category.....	77
Assessment and Diagnosis .....	78
Investigations and Procedures.....	82
Medication.....	86
Organisation of Care .....	89
Patient Communication and Comfort.....	94
Off Task.....	95
Task Distribution by Role .....	96
Summary.....	98

<b>CHAPTER 8: INTERVIEW FINDINGS .....</b>	<b>99</b>
Introduction .....	99
<i>Interview Participants .....</i>	<i>99</i>
<i>Interview Guide Development.....</i>	<i>100</i>
Delegation as Task Sharing .....	101
Perceptions of Task Responsibility.....	103
The Impact of Staffing on Team Coordination .....	107
Autonomy and Knowledge Sharing .....	111
<i>RN Protocols and Clinical Judgement.....</i>	<i>111</i>
<i>Cost and Benefits of NPs' Specialist Knowledge.....</i>	<i>115</i>
Summary .....	119
<b>CHAPTER 9: DISCUSSION .....</b>	<b>120</b>
Introduction .....	120
A Flexible Occupational Division of Labour.....	121
<i>Core Duties.....</i>	<i>121</i>
<i>Shared Tasks .....</i>	<i>124</i>
The Flexibility of Back-Up Behaviour .....	125
<i>Task Back-up .....</i>	<i>126</i>
<i>Autonomy Back-up .....</i>	<i>128</i>
<i>Knowledge Back-up.....</i>	<i>131</i>
Team Stability for Flexibility .....	136
<i>Team Experience and the Team Mental Model.....</i>	<i>137</i>
<i>Top-Down Coordination.....</i>	<i>140</i>
The Nature of Flexibility in the ED Fast Track Team.....	141
Study Limitations .....	145
Summary .....	145
<b>CHAPTER 10: CONCLUSIONS AND IMPLICATIONS.....</b>	<b>146</b>
Introduction .....	146
Defining Workforce Flexibility in the Healthcare Context .....	146
Implications.....	148
<i>Organising for Flexible Teams.....</i>	<i>148</i>
<i>Knowledge Development for Flexibility.....</i>	<i>149</i>
<i>Professional Regulation for Flexibility.....</i>	<i>151</i>
Adequacy of the Analytical Framework.....	152
Conclusion.....	153
<b>REFERENCES.....</b>	<b>154</b>

<b>APPENDICES.....</b>	<b>177</b>
Appendix A: ED Models of Care in NSW.....	177
Appendix B: Phase 1 Data Collection Tools .....	178
Appendix C: Phase 2 Interview Guide.....	185
Appendix D: Additional Phase 1 Time Study Results.....	187

## LIST OF TABLES

Table 1 Australasian Triage Scale recommended treatment times.....	16
Table 2 Analytical Framework – Ideal Types of Taylorism and Functional Flexibility.....	27
Table 3 Summary of literature included in the review.....	30
Table 4 Task categories used for time study data collection .....	56
Table 5 Inclusion and exclusion criteria for time study participants .....	59
Table 6 Time Study Data Analysis Methods.....	63
Table 7 Revised task categories used for data analysis .....	64
Table 8 Inclusion and exclusion criteria for the interview sample .....	68
Table 9 Six-step process of thematic analysis adapted from Braun and Clark (2006).....	70
Table 10 Time Study Sample .....	76
Table 11 Demographic Time Study Participant Information .....	76
Table 12 Mean proportion of time on top level task categories, with pairwise and overall significance .....	77
Table 13 Mean proportion of time on Assessment and Diagnosis tasks with pairwise and overall significance .....	79
Table 14 Frequency of Diagnosis tasks performed WITH by role.....	80
Table 15 Frequency of participants being a Supervisor and Supervisee WITH another role .....	81
Table 16 Mean proportion of time on Investigations and Procedures tasks with pairwise and overall significance .....	83
Table 17 Mean proportion of time on Medication tasks with pairwise and overall significance.....	86
Table 18 Frequency of Prescribing-related Tasks by Role .....	87
Table 19 Frequency of Medication Administering tasks by role .....	88
Table 20 Mean proportion of time on Organisation of Care tasks with pairwise and overall significance .....	89
Table 21 Mean proportion of time on professional communication WITH other roles as a % of all professional communication.....	91
Table 22 Overall task duration and rate.....	92
Table 23 Mean proportion of time on Patient Communication and Comfort tasks with pairwise and overall significance .....	94
Table 24 Mean proportion of time ‘Off Task’ with pairwise and overall significance .....	95
Table 25 Interview Participant Information.....	99
Table 26 Frequency of ‘Assessment and Diagnosis’ tasks observed by role.....	187
Table 27 Frequency of ‘Investigations and Procedures’ tasks observed by role .....	187

Table 28 Frequency of ‘Patient Communication and Comfort’ tasks observed by role .....	188
Table 29 Frequency of ‘Organisation of Care’ tasks observed by role.....	188
Table 30 Frequency of ‘Off Task’ tasks observed by role .....	189
Table 31 Count of investigations or procedures ordered recorded in task details spreadsheet.....	189
Table 32 Count of investigation-related procedures performed, recorded in task details spreadsheet .....	190
Table 33 Count of treatment-related procedures performed, recorded in task details spreadsheet .....	190

## LIST OF FIGURES

Figure 1 Summary of the Study Design.....	53
Figure 2 The Nature of Flexibility in the ED team .....	144
Figure 3 Example of recording of multi-skilling in WOMBAT .....	184



# ABSTRACT

## **Background**

The slow pace of reform towards a more responsive, adaptable and efficient healthcare workforce is often blamed on the ‘inflexibility’ of the healthcare professions. However, the concept of workforce flexibility is as ambiguous as it is ubiquitous. The aim of the study was to define workforce flexibility in the healthcare context by taking a division of labour perspective on a team, measuring the distribution of tasks between roles and exploring the teamwork practices and organisational factors that promote or hinder flexibility.

## **Study Setting and Method**

The emergency department (ED) was selected as a potential exemplar of workforce flexibility. EDs are at the forefront of redesigning professional roles to increase efficiency while the unpredictable and urgent workload makes for an environment where healthcare professionals must be flexible. An explanatory sequential mixed methods design was used. Phase 1 work observations involved a time study which collected 151 hours of quantitative data to compare tasks undertaken by doctors, nurse practitioners (NPs) registered nurses (RNs) and qualitative fieldnotes which captured everyday work practices and the organisational context. In Phase 2, 19 semi-structured interviews were conducted with doctors, NPs and RNs which sought to explain the Phase 1 findings.

## **Results**

The time study is the first to quantify how professional healthcare roles can be occupationally specialised but sufficiently multiskilled to create some overlap in the tasks they perform. The fieldnotes and interviews also generated new knowledge, in describing the teamwork of back-up behaviour between doctors and nurses. Three forms of back-up behaviour that used the team’s overlapping roles were identified: ‘task back-up’ where the team shared tasks based on the most efficient use of skills; ‘autonomy back-up’ to help a team member with less autonomy over focal medical tasks to ensure patients received timely medications and investigations; and ‘knowledge back-up’ to help teammates complete their tasks and develop as multiskilled professionals. Consistent with a growing body of evidence across healthcare settings, team members who worked together regularly were more willing and able to provide this back-up and were more effective in coordinating their specialised but overlapping roles.

## **Conclusion**

The study's unique insight on the work of a healthcare team highlights that workforce flexibility must be defined and evaluated from the perspective of the whole team, its patients and the organisational context. Taking this perspective revealed that healthcare professionals are more flexible than is often supposed but that individual team members, with their contextual understanding of the team, the work and the workplace are less interchangeable than current staffing practices assume. What healthcare teams need to work flexibly is stable membership. Further, the study identified that the policies that enact workforce reforms may be hindering the inherent flexibility of multiskilled, autonomous professionals.